

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference H2629 PCT S3	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, Item 5 below.	
International application No. PCT/EP2004/014450	International filing date (day/month/year) 17/12/2004	(Earliest) Priority Date (day/month/year) 19/12/2003
Applicant MAX-PLACNK-GESELLSCHAFT ZUR FÖRDERUNG DER...		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. _____

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

- b. ☒ none of the figures is to be published with the abstract.

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G01N33/58 G01N33/68

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, EMBASE, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	FIEHN O ET AL: "Metabolite profiling for plant functional genomics" NATURE BIOTECHNOLOGY 2000 UNITED STATES, vol. 18, no. 11, 2000, pages 1157-1161, XP002325275 ISSN: 1087-0156 cited in the application the whole document	1-22
X	figures; table 1 page 1157, left-hand column, line 1 - page 1159, left-hand column, line 10 ----- -/--	23,24, 26-28

☒ Further documents are listed in the continuation of box C.

☐ Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

19 April 2005

Date of mailing of the international search report

04/05/2005

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Döpfer, K-P

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>FIEHN O ET AL: "Identification of uncommon plant metabolites based on calculation of elemental compositions using gas chromatography and quadrupole mass spectrometry"</p> <p>ANALYTICAL CHEMISTRY 01 AUG 2000 UNITED STATES, vol. 72, no. 15, 1 August 2000 (2000-08-01), pages 3573-3580, XP002325276 ISSN: 0003-2700 cited in the application the whole document</p>	1-22
A	<p>WAGNER C ET AL: "Construction and application of a mass spectral and retention time index database generated from plant GC/EI-TOF-MS metabolite profiles"</p> <p>PHYTOCHEMISTRY, PERGAMON PRESS, GB, vol. 62, no. 6, March 2003 (2003-03), pages 887-900, XP004408975 ISSN: 0031-9422 the whole document</p>	1-22
A	<p>ALLEGOOD JEREMY CHADWICK ET AL: "Use of isotopically labeled palmitate to examine de novo sphingolipid biosynthesis by LC-MS/MS: a metabolomic approach."</p> <p>FASEB JOURNAL, vol. 17, no. 4-5, March 2003 (2003-03), pages Abstract No. 628.6 URL-http://ww, XP002325277 & FASEB MEETING ON EXPERIMENTAL BIOLOGY: TRANSLATING THE GENOME; SAN DIEGO, CA, USA; APRIL 11-15, 2003 ISSN: 0892-6638</p>	1-22
X	abstract	23,26-28
P,X	<p>MASHEGO M R ET AL: "MIRACLE: Mass isotopomer ratio analysis of U-13C-labeled extracts. A new method for accurate quantification of changes in concentrations of intracellular metabolites."</p> <p>BIOTECHNOLOGY AND BIOENGINEERING, vol. 85, no. 6, 20 March 2004 (2004-03-20), pages 620-628, XP002325278 ISSN: 0006-3592 the whole document</p>	1-28